

## **1999 Toxics Release Inventory**

### **WASHINGTON**

#### Reported Releases and Waste Management Activities (in pounds)

	Original Industries	New Industries	Total
On-site Releases	22,212,395	3,525,911	25,738,306
Air Emissions	18,913,981	1,262,291	20,176,272
Surface Water Discharges	3,098,503	1,642	3,100,145
Underground Injection Class I Wells	0	0	C
Underground Injection Class II-V Wells	0	0	C
On-site Land Releases to RCRA Subtitle C Landfills	1,865	0	1,865
Other On-site Land Releases	198,046	2,261,978	2,460,024
Off-site Releases (Transfers Off-site to Disposal)*	2,591,783	144,826	2,736,609
Total On- and Off-site Releases	24,804,178	3,670,737	28,474,915
Recycled On-site	37,945,844	1,736,294	39,682,138
Recycled Off-site	12,746,258	727,137	13,473,395
Energy Recovery On-site	15,687,058	0	15,687,058
Energy Recovery Off-site	615,451	789	616,240
Treated On-site	65,525,005	235,762	65,760,767
Treated Off-site**	3,841,430	246,856	4,088,286
Quantity Released On- and Off-site***	24,719,261	3,630,438	28,349,699
Total Production-related Waste Managed	161,080,307	6,577,276	167,657,583
Total Non-production-related Waste Managed	68,437	3,511	71,948

#### Transfers Off-site for Further Waste Management/Disposal

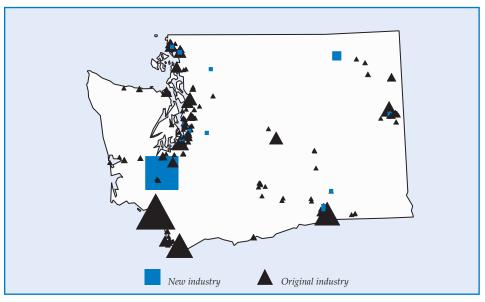
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Recycling	11,197,356	534,291	11,731,647
Energy Recovery	687,262	30,891	718,153
Treatment	876,999	97,772	974,771
Publicly Owned Treatment Works (POTWs)	3,007,959	1,037	3,008,996
Metals and Metal Compounds*	2,720	761	3,481
Non-metal TRI Chemicals**	3,005,239	276	3,005,515
Other Off-site Transfers****	0	0	0
Off-site Transfers to Disposal (not including metals to POTWs)	3,019,169	259,997	3,279,166
Total Transfers Off-site for Further Waste Management/Disposal	18,788,745	923,988	19,712,733

- Transfers to POTWs of metals and metal compounds are included in off-site releases. Excludes transfer amounts sent for disposal to other TRI facilities reporting that amount released on-site.
- \*\* Transfers to POTWs of non-metals are included in treated off-site waste management activity.
- \*\*\* Excludes non-production-related releases; e.g. releases due to catastrophic events or remedial actions.
- \*\*\*\*Transfers reported without a valid waste management code.

#### For More Information . . .

**State Contact: EPA Regional Contact:** To obtain TRI data use Christina Colt Idell Hansen assistance, call TRI User (360) 407-6727 (206) 553-4016 **Support Service (TRI-US):** Fax: (360) 407-6715 Fax: (206) 553-8509 (202) 260-1531

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The largest marker in the state map represents the largest facility for on-site releases in the state of Washington. All markers are proportionally-sized to represent the on-site releases at each facility within this state.

#### State/TRI Data

	O 641 CO / 1 1 1 1 1		
Population			5,756,361
Square Miles			66,581
Total Facilities			293
Total Forms			1,035
Form As			161
	Original Industries	New Industries	Total
National Rank for Total On- and Off-	-site Releases*		

	Original Industries	New Industries	Total
National Rank for Total On- and Of	ff-site Releases*		
Rank	28	45	37
Pounds	24,804,178	3,670,737	28,474,915
National Rank for Total On-site Rel	eases**		
Rank	27	45	36
Pounds	22,212,395	3,525,911	25,738,306
National Rank for Total Releases w	ithin State***		
Rank	30	44	38
Pounds	22,990,714	3,661,710	26,652,424
National Rank for Production-relate	ed Waste Managed		
Rank	30	44	35
Pounds	161,080,307	6,577,276	167,657,583

- Includes transfers out-of-state for disposal. Excludes transfer amounts sent for disposal to other TRI facilities reporting that amount released on-site.
- \*\* Includes amounts released at the facility. Excludes amounts transferred to other sites.
- \*\*\* Excludes transfers for disposal sent out-of-state or sent to other TRI facilities within the state reporting that amount released on-site.

# **1999 Toxics Release Inventory**

## **WASHINGTON**

### On-site and Off-site Releases for Top Ten Chemicals Ranked on Total Releases in the State (Original Industries)

			On-site R	eleases		Off-site Releases		Off-sit	te Transfers to Dispo	sal
CAS Number	Chemical	Air Emissions	Surface Water Discharges	Underground Injection	On-site Releases to Land	Transfers Off-site to Disposal*	Total Releases in the State**	Transferred Into State	Transferred Within State	Transferred Out of State
	25.4	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
67-56-1	Methanol	3,967,571	553,046	0	5,850	4,667	4,531,134	0	3,600	1,067
463-58-1	Carbonyl sulfide	2,322,374	0	0	0	0	2,322,374	0	0	0
	Nitrate compounds	266	1,860,942	0	58,055	334,029	2,253,292	0	5	334,024
7664-41-7	Ammonia	1,529,082	278,675	0	35,262	96,596	1,939,615	0	86,096	10,500
100-42-5	Styrene	1,542,819	193	0	0	5	1,543,017	0	5	0
	Polycyclic aromatic compounds	51,393	95	0	270	1,229,903	1,281,661	0	250	1,229,653
7647-01-0	Hydrochloric acid	1,256,633	0	0	0	0	1,256,633	0	0	0
7664-39-3	Hydrogen fluoride	1,220,201	5	0	5	1,237	1,221,448	0	1,237	0
7664-93-9	Sulfuric acid	1,137,619	0	0	0	0	1,137,619	0	0	0
78-93-3	Methyl ethyl ketone	869,173	2,129	0	5	9,732	881,039	130	9,043	689

Excludes amounts transferred to other TRI facilities in the state reporting that amount released on-site.
 The chemical ranking is based on the amounts in this column.

### On-site and Off-site Releases for Top Ten Chemicals Ranked on Total Releases in the State (Seven New Industries)

			On-site Re	eleases		Off-site Releases		Off-si	te Transfers to Dispos	sal
			Surface		On-site	Transfers	Total	Transferred	Transferred	Transferred
CAS		Air	Water	Underground	Releases to	Off-site to	Releases in	Into	Within	Out of
Number	Chemical	Emissions	Discharges	Injection	Land	Disposal*	the State**	State	State	State
		Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
	Barium compounds	861	429	0	681,070	21,407	703,767	14,000	21,407	0
7664-39-3	Hydrogen fluoride	598,898	0	0	0	0	598,898	0	0	0
	Manganese compounds	369	92	0	439,034	36,876	476,371	2,100	36,876	0
	Zinc compounds	243	270	0	274,117	81,095	355,725	1,600	31,832	49,263
7647-01-0	Hydrochloric acid	330,215	0	0	0	0	330,215	0	0	0
	Copper compounds	141	15	0	188,388	90,582	279,126	769	5,706	84,876
	Lead compounds	117	6	0	255,973	9,871	265,967	461	9,871	0
7664-93-9	Sulfuric acid	201,512	0	0	0	0	201,512	0	0	0
	Nitrate compounds	10	0	0	140,005	0	140,015	5	0	0
	Nickel compounds	21	32	0	104,915	3,597	108,565	183	3,597	0

Excludes amounts transferred to other TRI facilities in the state reporting that amount released on-site.

<sup>\*\*</sup> The chemical ranking is based on the amounts in this column.

## **WASHINGTON**

### On- and Off-site Releases for Top Ten Facilities Ranked on Total On-site Releases in the State (Original Industries)

				Off-site R (Transfers Off-sit					
			Undergrou	nd Injection_	On-site Re	eases to Land			
	Air	Surface Water	Class I	Class II-V	RCRA Subtitle C	Other On-site Land	Total On-site	Transferred	Transferred
Facility, City, County	Emissions	Discharges	Wells	Wells	Landfills	Releases	Releases*	Within State	Out of State
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Weyerhaeuser Co., Longview, Cowlitz	2,533,753	107,263	0	0	0	0	2,641,016	129,959	0
Fort James Camas L.L.C., Camas, Clark	1,147,405	531,060	0	0	0	2,825	1,681,290	0	34,000
Boise Cascade Paper Div., Wallula, Walla Walla	1,453,764	130,907	0	0	0	15,622	1,600,293	0	11
Kaiser Aluminum & Chemical Corp Mead Works, Mead, Spokane	911,255	290	0	0	0	255	911,800	1,150	9,600
Simpson Tacoma Kraft Co., Tacoma, Pierce	818,477	89,101	0	0	0	0	907,578	103	0
Longview Fibre Co., Longview, Cowlitz	604,725	142,160	0	0	0	0	746,885	104,400	0
Prodica L.L.C. Kennewick Plant/Kennewick Area, Kennewick, Benton	654,455	15,605	0	0	0	57,905	727,965	0	344,400
Kimberly-Clark Tissue Co., Everett, Snohomish	165,504	553,330	0	0	0	0	718,834	173,350	0
Alcoa Wenatchee Works, Malaga, Chelan	695,534	0	0	0	0	0	695,534	0	21,134
Intalco Aluminum Corp., Ferndale, Whatcom	615,177	0	0	0	0	40	615,217	0	0

<sup>\*</sup>The facility ranking is based on the amounts in this column; these quantities exclude transfers out of state.

#### On- and Off-site Releases for Top Ten Facilities Ranked on Total On-site Releases in the State (Seven New Industries)

				Off-site Releases (Transfers Off-site to Disposal)					
			Undergrou	nd Injection	On-site Rel	eases to Land			
		Surface			RCRA	Other	Total		
	Air	Water	Class I	Class II-V	Subtitle C	On-site Land	On-site	Transferred	Transferred
Facility, City, County	Emissions	Discharges	Wells	Wells	Landfills	Releases	Releases*	Within State	Out of State
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Centralia Power Plant, Centralia, Lewis	1,029,089	627	0	0	0	1,783,348	2,813,064	48,819	0
Kettle River Ops. Mill, Republic, Ferry	47	0	0	0	0	478,415	478,462	11	0
City of Tacoma Steam Plant No 2, Tacoma, Pierce	103,550	0	0	0	0	10	103,560	59,785	0
Encogen Northwest Cogeneration Plant, Bellingham, Whatcom	54,005	0	0	0	0	0	54,005	0	0
Tidewater Terminal Co. Snake River Terminal, Pasco, Franklin	25,300	0	0	0	0	0	25,300	0	0
Tosco Renton Terminal, Renton, King	11,385	0	0	0	0	0	11,385	0	0
Northwest Terminalling Co. (Pasco), Pasco, Franklin	10,571	0	0	0	0	0	10,571	0	0
Conoco Parkwater Product Terminal, Spokane, Spokane	10,240	0	0	0	0	0	10,240	0	0
Equilon Seattle Terminal, Seattle, King	5,000	250	0	0	0	0	5,250	1,255	0
Tenaska Washington Partners Ferndale Cogeneration Facility, Ferndale, Whatcom	4,100	0	0	0	0	0	4,100	0	0

<sup>\*</sup>The facility ranking is based on the amounts in this column; these quantities exclude transfers out of state.

## **WASHINGTON**

#### Total Production-related Waste for Top Ten Facilities Ranked on Quantity Released On- and Off-site (Original Industries)

Facility, City, County	<b>Recycled</b> <b>On-site</b> Pounds	Recycled Off-site Pounds	Energy Recovery On-site Pounds	Energy Recovery Off-site Pounds	Treated On-site Pounds	Treated Off-site Pounds	Quantity Released On- and Off-site* Pounds	Total Production- related Waste Managed Pounds	Total Non- Production- related Waste Managed Pounds
Weyerhaeuser Co., Longview, Cowlitz	1,400	0	0	700	7,479,237	0	2,774,902	10,256,239	23
Fort James Camas L.L.C., Camas, Clark	0	0	1,171,700	0	11,332,011	66,900	1,723,450	14,294,061	9
Boise Cascade Paper Div., Wallula, Walla Walla	0	0	31,000	0	8,970,500	0	1,600,701	10,602,201	0
Reynolds Metals Co., Longview Reduction Plant, Longview, Cowlitz	0	17,285	0	0	3,213,223	2,921	1,537,968	4,771,397	0
Prodica L.L.C. Kennewick Plant/Kennewick Area, Kennewick, Benton	0	0	0	0	0	0	1,015,920	1,015,920	56,800
Kaiser Aluminum & Chemical Corp Mead Works, Mead, Spokane	2,790	2,000,000	0	0	64,000	0	922,470	2,989,260	0
Simpson Tacoma Kraft Co., Tacoma, Pierce	0	0	298,000	0	5,272,100	0	903,460	6,473,560	125
Longview Fibre Co., Longview, Cowlitz	56,000	76,000	200,490	0	7,244,100	0	855,719	8,432,309	8
Kimberly-Clark Tissue Co., Everett, Snohomish	0	0	160,800	0	3,676,500	173,350	718,750	4,729,400	0
Alcoa Wenatchee Works, Malaga, Chelan	8,190,638	0	0	0	0	0	695,814	8,886,452	0

<sup>\*</sup>The facility ranking is based on the amounts in this column; these quantities exclude non-production-related releases.

#### Total Production-related Waste for Top Ten Facilities Ranked on Quantity Released On- and Off-site (Seven New Industries)

Facility, City, County	<b>Recycled</b> <b>On-site</b> Pounds	Recycled Off-site Pounds	Energy Recovery On-site Pounds	Energy Recovery Off-site Pounds	Treated On-site Pounds	Treated Off-site Pounds	Quantity Released On- and Off-site* Pounds	Total Production- related Waste Managed Pounds	Total Non- Production- related Waste Managed Pounds
Centralia Power Plant, Centralia, Lewis	0	0	0	0	96,966	0	2,861,731	2,958,697	0
Kettle River Ops. Mill, Republic, Ferry	0	0	0	0	0	11	478,400	478,411	0
City of Tacoma Steam Plant No 2, Tacoma, Pierce	0	189,897	0	0	0	0	163,343	353,240	0
Encogen Northwest Cogeneration Plant, Bellingham, Whatcom	0	0	0	0	0	0	54,263	54,263	0
Tidewater Terminal Co. Snake River Terminal, Pasco, Franklin	9,000	0	0	0	23,211	5,970	25,247	63,428	0
Northwest Terminalling Co. (Pasco), Pasco, Franklin	0	0	0	0	53,284	203	10,573	64,060	0
Tosco Renton Terminal, Renton, King	417,140	62	0	62	18	2,630	10,460	430,372	0
Conoco Parkwater Product Terminal, Spokane, Spokane	0	0	0	0	0	1,627	8,945	10,572	0
Equilon Seattle Terminal, Seattle, King	0	2	0	32	0	407	4,360	4,801	0
Tenaska Washington Partners Ferndale Cogeneration Facility, Ferndale, Whatcom	0	0	0	0	0	0	4,100	4,100	0

<sup>\*</sup>The facility ranking is based on the amounts in this column; these quantities exclude non-production-related releases.